

# Distribution and Life History Notes on the Southeastern Five-Lined Skink, *Eumeces inexpectatus* Taylor, in Kentucky

ERIC M. RUNDQUIST AND JOSEPH T. COLLINS

Museum of Natural History, University of Kansas, Lawrence, Kansas 66045

Barbour and Ernst (1971) defined the range of *Eumeces inexpectatus* in Kentucky on the basis of records or literature reports from Barren, Bell, McCreary, Powell, and Whitley counties, mostly in the southeastern part of the state. With the exception of the Barren County specimen, these records are restricted to or along the edge of the mountainous, heavily forested area of eastern Kentucky. Excepting the Barren County record, this lizard has not been known from western Kentucky, but Barbour (1971) speculated that it might be found as far west in the state as Todd County. Snyder (1972) did not find *Eumeces inexpectatus* in the Land Between The Lakes (LBL) in Trigg and Lyon counties, southwestern Kentucky, but indicated (p. 84) that there was a "moderate possibility" of its occurrence in that area.

Recent field work in the LBL region and reexamination of specimens of *Eumeces* in the herpetological collection of the Museum of Natural History at the University of Kansas (KU) have resulted in the discovery of specimens of *Eumeces inexpectatus* from new localities in western and southwestern Kentucky.

During May 1973 one of us (EMR) and Walter E. Boles spent 10 days collecting amphibians and reptiles in southwestern and west-central Kentucky. Six examples of *Eumeces inexpectatus* were collected at the following Kentucky localities: EDMONSON COUNTY: W Horse cave near border Mammoth Cave National Park (KU 154079); TRIGG COUNTY: ca. 7 mi (11 km) ESE Aurora in LBL (KU 154077-078 & KU 154080); ca. 10 mi (16 km) ESE Aurora in LBL (KU 154081-082). In addition, 9 previously overlooked specimens of this lizard were discovered from the following Kentucky localities: HART COUNTY: 6-7 mi (10-11 km) NW Cave City near border

Mammoth Cave National Park (KU 143707-708); LYON COUNTY: 7 mi (11 km) N Lyon-Trigg county line on Ky. Hwy. 453 (KU 137757); McCREARY COUNTY: 6.4 mi (10.3 km) WNW Stearns on Ky. Hwy. 92 (KU 143705-706), 0.7 mi (1.1 km) W Cumberland Falls (KU 144580), no other locality data (KU 144581); TRIGG COUNTY: 0.5 mi (0.8 km) NE jct. eastern shore Kentucky Lake and U.S. Hwy. 68 in LBL (KU 144576-577). The specimens from Edmonson, Hart, and McCreary counties supplement the records of Ernst and Barbour (1971), and those from Lyon and Trigg counties extend the range of *Eumeces inexpectatus* ca. 130 miles (210 km) (air-line) west into southwestern Kentucky (Fig. 1).

Virtually nothing is known of the life history in Kentucky of *Eumeces inexpectatus* and its relationships with *Eumeces fasciatus*, a more wide ranging and (evidently) more abundant species with which it is sympatric over large areas.

Only 3 female Kentucky *Eumeces inexpectatus* (KU 137757, 143707, 144581) were available for examination. These specimens contained an average of 11 undeveloped ova. This differs little from the ova counts obtained from 4 female *Eumeces fasciatus* taken in sympatry with *Eumeces inexpectatus* in Kentucky, although our sample size is too small to be conclusive.

Analysis of stomach contents of 12 *E. inexpectatus* and 13 *E. fasciatus* from their area of sympatry in Kentucky showed no appreciable difference in the diet of these species. Both species consumed large numbers of spiders compared to other invertebrate diet items which included (in descending order of item occurrence) crickets, cockroaches, caterpillars, grasshoppers, ants, beetle larvae, snails, and moths.

Although our data sample is small, these

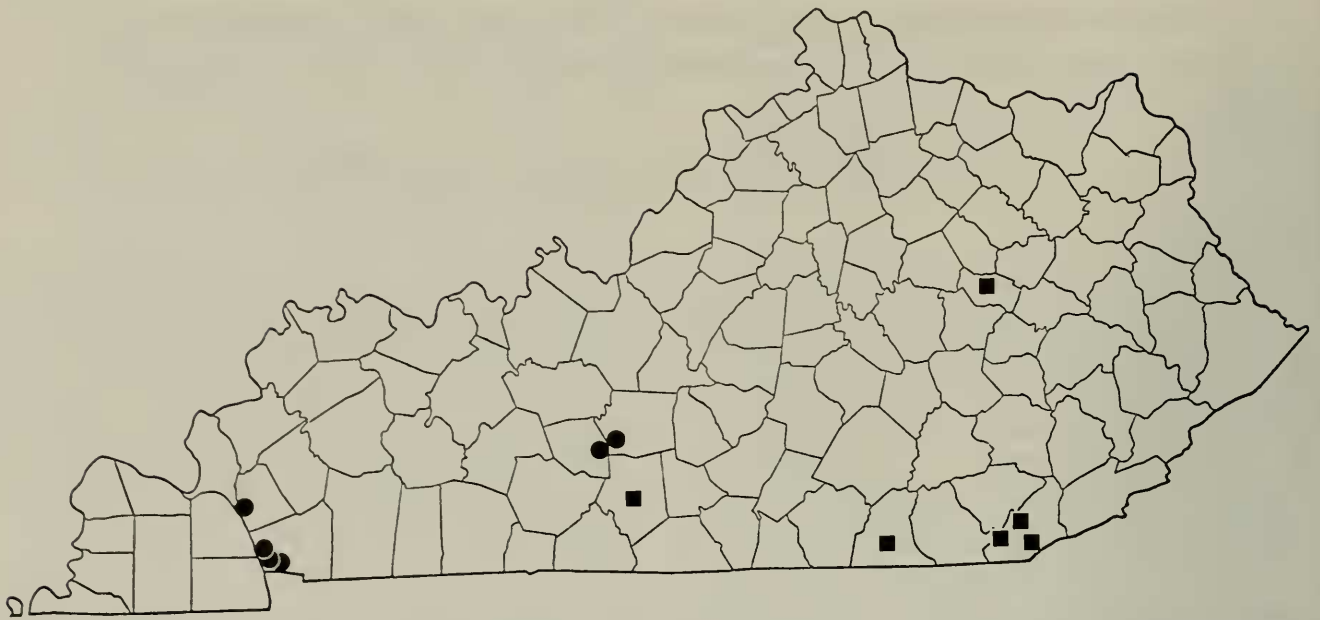


FIG. 1. Known localities from which *Eumeces inexpectatus* has been collected in Kentucky. The solid squares represent records reported by Barbour and Ernst (1971). The solid circles are new localities based on specimens reported in this paper.

observations tentatively indicate little difference in reproductive potential or diet in these 2 lizards. More specimens and, particularly, associated microhabitat data are needed to determine what, if any, non-morphological differences separate Kentucky *Eumeces inexpectatus* and *Eumeces fasciatus* in areas of sympatry.

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